



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/560,312

12/09/2005

Izumi Usuki

P28954

4988

52123 7590 04/30/2008
GREENBLUM & BERNSTEIN, P.L.C.
1950 ROLAND CLARKE PLACE
RESTON, VA 20191

EXAMINER

INGVOLDSTAD, BENNETT

ART UNIT

PAPER NUMBER

2623

NOTIFICATION DATE

DELIVERY MODE

04/30/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

gbpatent@gbpatent.com
pto@gbpatent.com

Office Action Summary	Application No. 10/560,312	Applicant(s) USUKI ET AL.	
	Examiner BENNETT INGOLDSTAD	Art Unit 2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 December 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>3/10/2006, 9/5/2006, 9/19/2006</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement filed 19 September 2006 fails to comply with 37 CFR 1.98(a)(1), which requires the following: (1) a list of all patents, publications, applications, or other information submitted for consideration by the Office; (2) U.S. patents and U.S. patent application publications listed in a section separately from citations of other documents; (3) the application number of the application in which the information disclosure statement is being submitted on each page of the list; (4) a column that provides a blank space next to each document to be considered, for the examiner's initials; and (5) a heading that clearly indicates that the list is an information disclosure statement. The information disclosure statement has been placed in the application file, but the information referred to therein has not been considered.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claim 11 is rejected under 35 U.S.C. 102(b) as being anticipated by Yamaguchi (WO 03/073753).

Claim 11: Yamaguchi discloses a burst transmitting method in which burst transmission of compressing (generating [pg. 7, l. 5-9] compressed zapping data [pg. 13, l. 14-23]) and transmitting contents of each of services in a short time period (transmitting zapping data in a brief time [pg. 8, l. 10-20]) at a transfer rate sufficiently higher than a reproduction rate of the contents of each service is performed (e.g., a single packet containing an i-frame [pg. 15, l. 19-23], which is then reproduced while the program data buffer is filling [pg. 41, l. 1-2], has a transfer rate that is higher than a reproduction rate) , characterized in that

- data relating to each service is concentrated as zapping data, arranged in a burst for zapping, and transmitted as a zapping burst (in a brief time burst [pg. 8, l. 10-20])

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-7 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaguchi (WO 03/073753) in view of Ertel (US 2002/0051462).

Claim 1: Yamaguchi discloses a transmission method in a broadcasting system, comprising:

- generating a first stream for [...] transmission of a packet set containing unitary content for each service (program data [pg. 13, l. 1-13] in packets [pg. 1, l. 5-10]); and
- generating a second stream for transmitting packets at a speed conforming to the transmission rate required for the service (zapping data [pg. 13, l. 14-23] at a speed enabling quick program zapping [pg. 8, l. 10-20]);
- wherein the second stream carries information relating to the content transmitted in the first stream [pg. 6, l. 4-8].

Yamaguchi does not further disclose that the first stream is generated for burst transmission.

Ertel discloses that program data may be transmitted over CDMA burst packet-switched channels [para 0007].

It would have been obvious to have transmitted the program data in a burst transmission for the purpose of transmitting program data to devices connected through wireless CDMA systems [Ertel para 0002]. It would further have been obvious to have combined the teachings of Yamaguchi and Ertel because Ertel provides a side channel for transmitting part of the total amount of data [para 0007] that is well-suited for carrying the second stream, i.e. the zapping data.

Claim 2: Yamaguchi in view of Ertel further discloses a transmission method as described in claim 1,

- wherein the first stream sequentially transmits intermittent data (time division multiplexed [Ertel para 0007]) for a plurality of services (program channels [Yamaguchi pg. 5, l. 15-19]); and
- the second stream transmits content equivalent to the content transmitted by all or part of the services transmitted in the intermittent portion of the first stream (zapping content for equivalent programs [Yamaguchi pg. 15, l. 11-23]).

Claim 3: Yamaguchi further discloses a transmission method as described in claim 2,

- wherein the first stream transmits high quality data (the program [pg. 13, l. 3-13]), and
- the second stream transmits the same content as the first stream compressed at a high compression rate to a smaller amount of data (the program I-frames with other frames removed [pg. 13, l. 14-23]).

Claim 4: Yamaguchi in view of Ertel further discloses a transmission method as described in claim 2,

- wherein the first stream is data containing high quality audio and video data [pg. 13, l. 3-13], and the second stream contains at least one of still

image data and audio data relating to the first stream (i-frames or voice data [pg 13, l. 14-23]).

Claim 5: Yamaguchi further discloses a transmission method as described in claim 2,

- wherein at least one of the first stream and second stream has a data field denoting the relationship between content transmitted in the second stream and first stream (streams may be MPEG streams [pg. 24, l. 11-18], which carry program information denoting the relationship [pg. 13, l. 24-pg. 14, l. 8] in a program specific information PSI section in the transport stream)

Claim 6: Yamaguchi further discloses a transmission method as described in claim 2,

- wherein a data field denoting the relationship between content transmitted in the second stream and first stream is contained in a third stream [pg. 25, l. 6-11].

Claim 7: Yamaguchi further discloses a transmission method as described in claim 2,

- wherein a data field denoting the relationship between content transmitted in the second stream and first stream is contained in the PMT of the PSI

(streams may be MPEG streams [pg. 24, l. 11-18], which contain program information in a program map table PMT of the program specific information PSI)

Claim 9: Yamaguchi discloses a transmission apparatus for a broadcasting system, comprising:

- a first stream generator for [...] transmission of a packet set containing unitary content for each service (program data [pg. 13, l. 1-13] in packets [pg. 1, l. 5-10]); and
- a second stream generator for transmitting packets at a speed conforming to the transmission rate required for the service (zapping data [pg. 13, l. 14-23] at a speed enabling quick program zapping [pg. 8, l. 10-20]);
- wherein the second stream carries information relating to the content transmitted in the first stream [pg. 6, l. 4-8].

Yamaguchi does not further disclose that the first stream is generated for burst transmission.

Ertel discloses that program data may be transmitted over CDMA burst packet-switched channels [para 0007].

It would have been obvious to have transmitted the program data in a burst transmission for the purpose of transmitting program data to devices connected through wireless CDMA systems [Ertel para 0002]. It would further have been obvious to have combined the teachings of Yamaguchi and Ertel because Ertel

provides a side channel for transmitting part of the total amount of data [para 0007] that is well-suited for carrying the second stream, i.e. the zapping data.

6. Claims 8 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaguchi (WO 03/073753) in view of Ertel (US 2002/0051462), further in view of Nieczyporowicz (US 6724741).

Claim 8: Yamaguchi in view of Ertel does not specifically disclose a transmission method as described in claim 1,

- wherein a time information field denoting the time from transmission of one packet set to transmission of the next packet set is contained in the second stream.

Nieczyporowicz discloses that a side channel in a CDMA system such as the side channel for carrying the second stream disclosed by Yamaguchi in view of Ertel may carry time information for establishing synchronization [col. 4, l. 20-30], i.e., for correlating the receiving device to the packet reception timing. It would have been obvious to have modified the method of Yamaguchi in view of Ertel for the purpose of synchronizing receivers to a synchronous CDMA system [col. 4, l. 20-30].

Claim 10: Yamaguchi in view of Ertel further discloses the transmission apparatus of claim 9,

- wherein said first stream comprises an intermittent data portion (intermittent bursts [para 0007]), and

Yamaguchi in view of Ertel does not further specifically disclose:

- wherein said second stream comprises a continuous data portion

Nieczyporowicz discloses that a side channel in a CDMA system such as the side channel for carrying the second stream disclosed by Yamaguchi in view of Ertel may be an asynchronous channel for establishing synchronization [col. 4, l. 20-30]. It would have been obvious to have made the side channel an asynchronous side channel for the purpose of establishing synchronization between devices. It further would have been obvious to have made the asynchronous side channel to be continuous for the purpose of easily establishing communication between devices that are out of synchronization [col. 4, l. 20-30].

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BENNETT INGOLDSTAD whose telephone number is (571)270-3431. The examiner can normally be reached on M-Th 8-6:30 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Scott Beliveau can be reached on (571) 272-7343. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BI

/Scott Beliveau/

Supervisory Patent Examiner, Art Unit 2623